



ILLINOIS DEPARTMENT OF
PUBLIC HEALTH

A Healthier Today For A Better Tomorrow

976035

Bernard J. Turnock, M.D., Director

#910178901H

October 23, 1989

EPA Region 5 Records Ctr.



293057

Lawrence J. Brown, D.D.

Non-responsive

Dear Non-responsive:

The United States Environmental Protection Agency (USEPA) has requested that staff within the Environmental Toxicology Program of this agency review the analytical results of a water sample taken from your well, and comment on the potential health effects posed by continued consumption of this water.

The results of the USEPA analysis for organic parameters indicated chlorobenzene at 2 parts per billion (ppb). The proposed health standard for public water supplies is 100 ppb. Vinyl chloride was also found at 0.4 ppb. The current health standard for vinyl chloride in public water supplies is 2 ppb. For your information a part per billion is the equivalent of one drop in 16,000 gallons. Since such organic compounds are not normally found in ground water and even though they have been detected at levels below current health standards, they do indicate that a low-level contamination of your water supply exists. Future monitoring of your water may be necessary to be sure the levels remain safe.

The results of the USEPA analysis for inorganic parameters indicated sodium at a level that would be a concern if consumers of the water have a history of high blood pressure or are on a low-sodium diet. Such individuals may wish to consult their physician regarding this finding.

The level of the lead detected in your water supply was 200 ppb and the current standard is 50 ppb. Based on additional health information, the USEPA is likely to lower this standard significantly. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure is to young children and pregnant women.

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Page 2

While the source of the lead may be environmental (e.g. ground water), it could also be that the lead source may be your home's plumbing. Lead levels in your drinking water are likely to be highest:

- if your home or water system has lead pipes, or
- if your home has copper pipes with lead solder, and
- if the home is less than six years old, or
- if you have soft or acidic water, or
- if water sits in the pipes for several hours.

An Illinois licensed plumber can be contacted to determine if lead piping, solder, or flux have been used in the plumbing system. If the water distribution piping contains lead, its replacement can reduce a source of lead in your drinking water. Also, since water which has been sitting in pipes for several hours (overnight) can be a cause of high lead levels, letting the water run several minutes each morning before drawing it for consumption can help to reduce exposure to lead.

Based on the significant level of lead found in your water supply, we would have to recommend that you seek an alternative water supply or consultation to determine if your distribution system may be the source of lead and implement ways of reduction.

If you have any questions, please do not hesitate to contact me at 217/782-5830 or 525 West Jefferson Street, Springfield, Illinois 62761.

Sincerely,

Bruce C. Barrow

Bruce C. Barrow, MA
Environmental Toxicology Program

cc: William Messenger, USEPA, Region 5
Paul Purseglove, IEPA-LPC
Division of Environmental Health, Region 7
Central Office File